

# University Hygienic Laboratory

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## Response to Novel H1N1



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# Role of Iowa's Public Health Laboratory



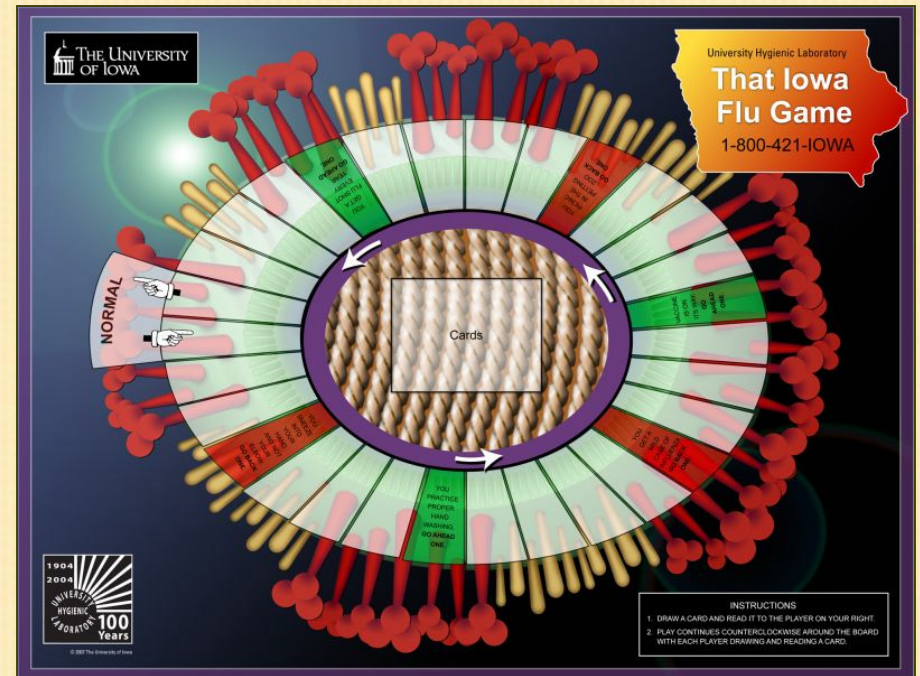
- Preparation
- Role during the spring outbreak
- Fall update





# Pre-pandemic Planning

- 2005 – Pandemic plan
- 2005 – 09 Training
  - 1,963 scientists and others
  - “That Iowa Flu Game”
    - Iowa, Texas, Florida, nationwide
- 2008 – CDC/UHL study to validate new faster, more sensitive molecular test
- 2008 – CDC/UHL study to assess needs during a pandemic



# Spring 2009

## Novel H1N1 Emerges in Iowa

<i>Sent first two positives to CDC</i>	<i>Third positive arrives at Laboratory</i>	<i>Six more positives arrive for testing</i>	<i>UHL among first to confirm virus</i>	<i>1,401 tests performed since April 23</i>
4/23/2009	4/25/2009	5/6/2009	5/30/2009	



# Volume of Testing

Average Turnaround Time: 22 hours (17 h – 30 h)

Week	Rec'd	Tested	Flu A	Novel Flu	Seasonal Flu
4/27-5/2	684	498	18	0	10
5/4- 5/9	619	472	62	56	8
5/10-5/15	237	187	22	19	8
5/18-5/23	167	163	20	11	9
5/25-5/30	89	81	17	22	1
Total	<b>1796</b>	<b>1401</b>	139	108	36

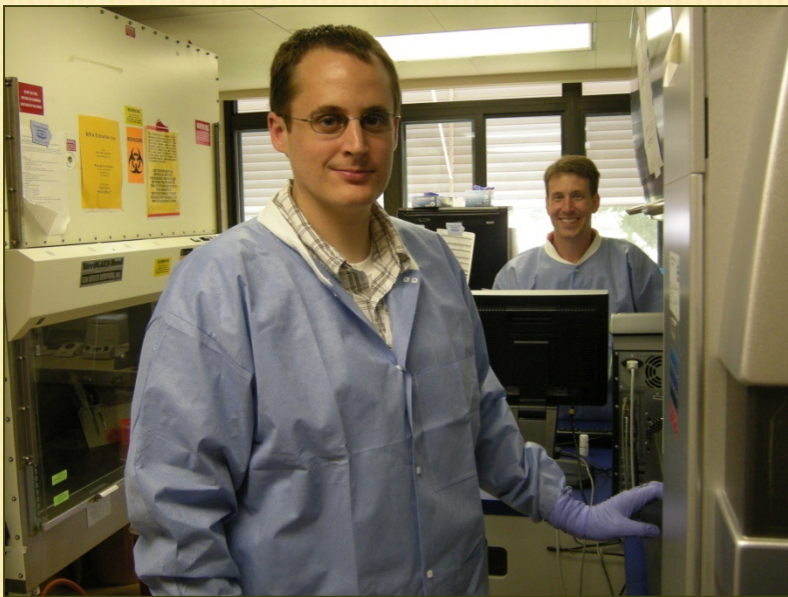


# Meeting the Challenges

Challenge: Sustain testing levels in surge

Solution: Robotic testing unit

- Manual specimen processing = 20/day
- Robotic specimen processing = 72/day



Challenge:

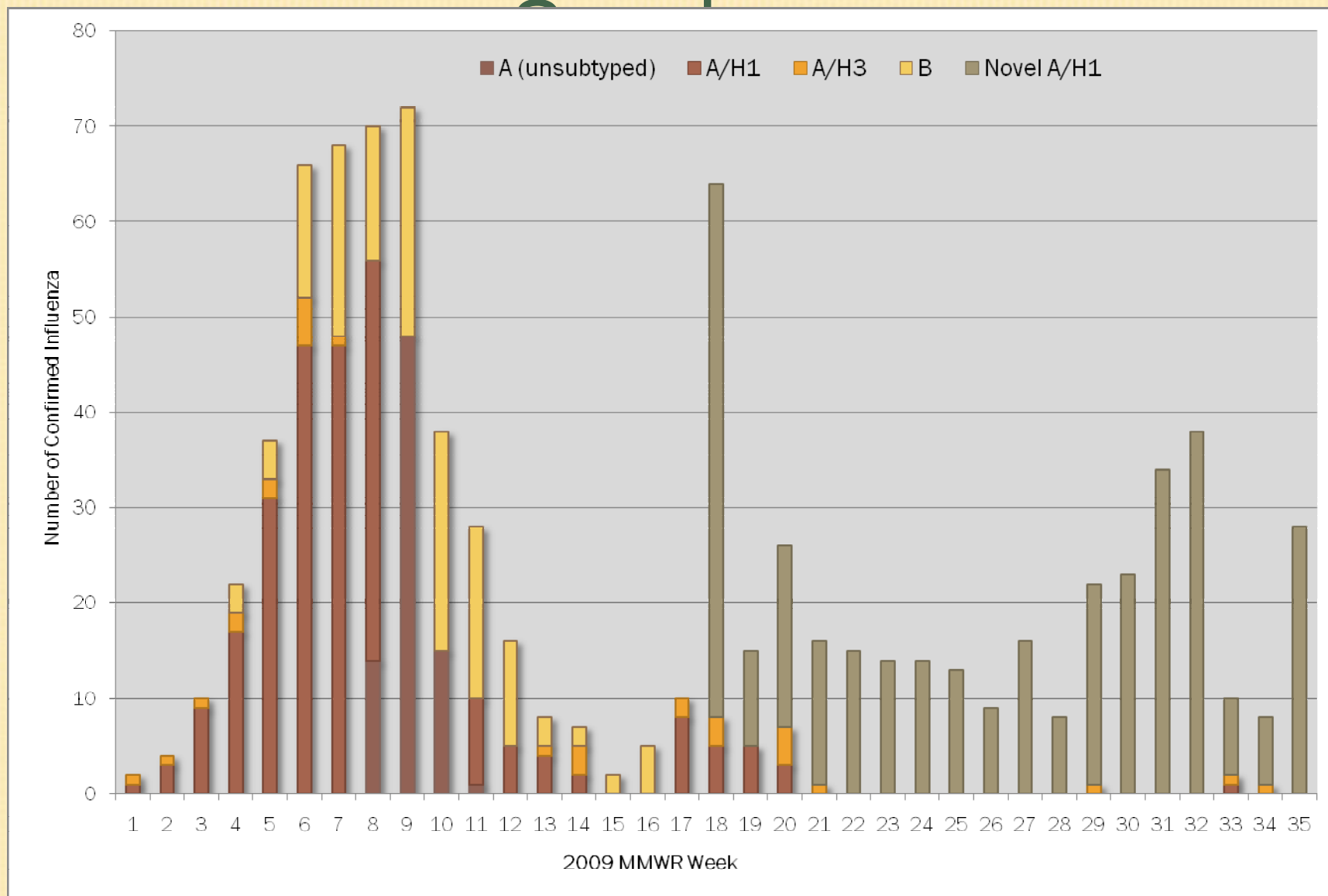
Staffing to conduct testing

Solution:

Assistance of CDC fellows



# UHL Confirmed Influenza





# Contributors to Success

- Confirmatory testing quickly in-house
- Weekend testing and double shifts
- Reporting results online
  - to CDC
  - to clinics
- Assistance of EID Fellows
- Conference calls with clinical labs
- Testing guidelines





# Additional Cost-containment and Resource Reallocation

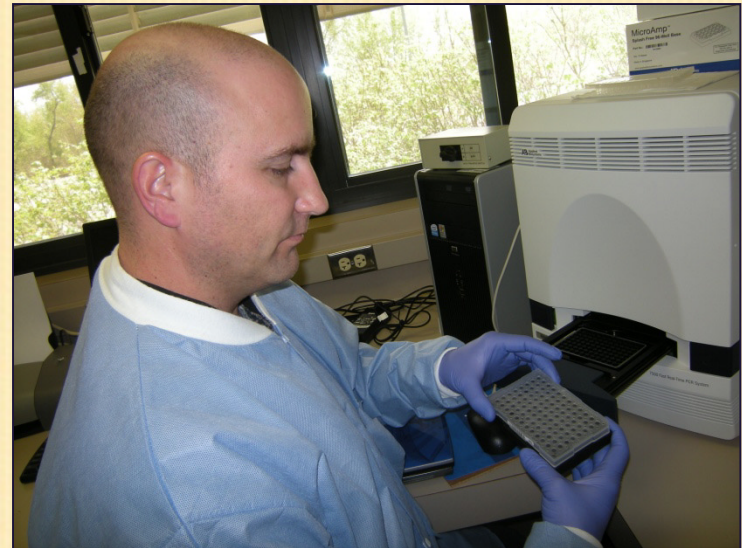
- Utilized statewide, contracted courier to transport novel H1N1 specimens
- Gatekeeper role to limit unnecessary testing
  - Followed CDC screening guidelines
  - Once confirmed in community, not necessary to test



# Fall Updates

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- Novel H1N1 never went away
- Hygienic Lab is growing virus for CDC
- Added two additional fellows
- Education
  - Healthcare providers
  - Daycare workers
  - Lab staff across state





# Estimated Cost for Novel H1N1 Testing

- **Since April 21, 2009**
  - Lab equipment and supplies = \$277,204
  - Lab staff labor + \$246,682
  - Statewide courier + \$128,258
  - Subtotal = \$652,144
- **Through March 31, 2010 (if testing levels remain constant)**
  - Lab equipment and supplies = \$187,170
  - Lab staff labor + \$199,432
  - Statewide courier + \$128,258
  - Subtotal additional costs = \$514,860

TOTAL PROJECTED COSTS \$1,167,004

(4/21/09 through 3/31/10)

